Docket No.

221519US0PCT

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Seiko HIRANO, et al.

SERIAL NO:

New US PCT application based on PCT/JP00/06913

GAU:

".FILED:

Herewith

**EXAMINER:** 

FOR:

GENES FOR HEAT RESISTANT ENZYMES OF AMINO ACID BIOSYNTHETIC PATHWAY DERIVED FROM

THERMOPHILIC CORYNEFORM BACTERIA

# INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

SIR:

Applicant(s) wish to disclose the following information.

### REFERENCES

- The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- A check is attached in the amount required under 37 CFR §1.17(p).

#### **RELATED CASES**

- Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

## CERTIFICATION

- Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

#### DEPOSIT ACCOUNT

Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Norman F. Oblon

Registration No.

24,618

ochas

Surinder Sachar

Registration No.

34,423



Tel. (703) 413-3000 Fax. (703) 413-2220 (OSMMN 10/01)

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- Form PTO 1449		U.S. DEPARTMENT OF	C COMMERCE	ATTY DOCKET NO.		SERIAL NO.  New US PCT application based on PCT/JP00/06913			
(Modified)		O.S. DEPARTMENT OF PATENT AND TRADE		221519US0PCT					
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LIST OF REFERENCES CITED BY APPLICANT				Seiko HIRANO, et al.					
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U.S. PATENT DOCUMENTS									
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		DOCUMENT NUMBER	DATE	COUNTRY		YES		SLATION NO	
	AC	7-63383	07/12/95	JP		<del>                                     </del>		No	
-	AD	4-4887	01/09/92	JP		<del> </del>		No	
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	Al	95/23224	08/31/95	wo				No	
	AJ	10-234371	09/08/98	JP	1			No	
	AK	7-121227 J	12/25/95	JP	JP			No	
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	АМ	10-165180	06/23/98	JP	JP .			No	
	AN	2-291276	04/18/90	JP				No	
	AO	11-196887 🗸	07/27/99	JP				No	
	AP	8-66189	03/12/96	JP				No	
	AQ	97/48790	12/24/97	wo				No	
	AR	95/34672	12/21/95	wo				No	
	AS	6-502548	03/24/94	JP				No	
	AT	8-196280 <i>J</i>	08/06/96	JP				No	
	AU	5-244958	09/24/93	JP				No	
		OTHER REF	ERENCES (	(Including Author, Title, Date, Pertinent	t Pages, e	tc.)			
K. TAKAI et al.: "PPC, the gene for phosphoenolpyruvate carboxylase from an extremely thermophilic bacterium, rhodothermus obamensis: cloning, sequencing and overexpression in Escherichia coli"  MICROBIOLOGY, vol. 144, no. 5, pages 1423-1434									
	AW	D. WEREECKE et al.: "Cloning and sequence analysis of the gene encoding isocitrate lyase from Rhodococcus fascians"  GENE, vol. 145, no. 1, pages 109-114  1994							
	AX	W. JAGER et al.: "A Corynebacterium glutamicum gene encoding a two-domain protein similar to biotin carboxylases and biotin-carboxyl-carrier proteins"  ARCH. MICROBIOL., vol. 166, no. 2, pages 977-984  1996							
	AY	S. DONADIO et al.: "Erythromycin production in saccharopolyspora erythraea does not require a functional propionyl-CoA carbocylase"  MOL. MICROBIOL., vol. 19, pages 977-984  1996  Additional References sheet(s) at the same of the same						sheet(s) attached	
Examiner						Date Considered			
*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.									

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ATTY DOCKET NO. SERIAL NO. ١, U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE Form PTO 1449 (Modified) New US PCT application 221519US0PCT based on PCT/JP00/06913 APPLICANT LIST OF REFERENCES CITED BY APPLICANT Seiko HIRANO, et al. GROUP FILING DATE Herewith OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.) E. KUMURA et al.: "Molecular cloning of a novel gene, dtsR, which rescues the detergent sensitivity of a mutant derived from Brevibacterium lactofermentum" ΑZ BIOSCI. BIOTECHNOL. BIOCHEM., vol. 60, pages 1565-1570 1996 A.M. ALVES et al.: "Characterization and phylogeny of the pfp gene of Amycolatopsis methanolica encoding PPi-dependent phosphofructokinase" AAA J. BACTERIOL., vol. 178, pages 149-155 1996 A.M.C.R. ALVES et al.: "Identification of ATP-dependent phosphofructokinase as a regulatory step in the glycolytic pathway of the acnomycete Streptomyces coelicolor" AAB APPL. ENVIRON. MICROBIOL., vol. 63, pages 951-956 1997 W. KRONEMEYER et al.: "Structure of the gluABCD cluster encoding the glutamate uptake system of corynebacterium glutamicum" J. BACTERIOL., vol. 177, pages 1152-1158 C. ROLLIN et al.: "13C-NMR studies of corynebacterium melassecola metabolic pathways" AAD EUR. J. BIOCHEM., vol. 227, no. 1-2, pages 488-493 S. HEIN et al.: "Biochemical and molecular characterization of the Alcaligenes eutrophus pyruvate dehydrogenase complex and identification of new type of dihydrolipoamide dehydrogenase" AAE J. BACTERIOL., vol. 176, pages 4394-4408 1994 P.E. STEPHENS et al.: "The pyruvate dehydrogenase complex of Escherichia coli K12. Nucleotide dequence encoding the pyruvate dehydrogenase component" EURO. J. BIOCHEM., vol. 133, pages 155-162 M.P. RUKLISH et al.: "The functioning of the tricarboxylic acid cycle in Brevibacterium flavum and Micrococcus glutamicus" MIKROBIOLOGIA, vol. 56, no. 5, pages 759-763 AAG J.M. MENGAUD et al.: The major iron-containing protein of Legionella pneumophila is an aconitase homologous with the human iron-responsive element-binding protein' AAH J. BACTERIOL., vol. 175, pages 5666-5676 C. PRODROMOU et al.: "The aconitase of Esherichia coli. Nucleotide sequence of the aconitase gene and amino sequence similarity with mitochondrial isopropylmalate isomerases" EUR. J. BIOCHEM., vol. 204, pages 599-609 1992 B.J. EIKMANNS et al.: "Cloning, sequence analysis, expression, and inactivation of the Corynebacterium glutamicum icd gene encoding isocitrate dehydrogenase and biochemical characterization of the enzyme" J. BACTERIOL., vol. 177, pages 774-782 1993 ISHI et al.: "Genes encoding two isocitrate dehydrogenase isozymes of a psychrophilic bacterium, Vibrio sp. Strain Α. ABE-1" AAK J. BACTERIOL., vol. 175, pages 6873-6880 1993 B.J. EIKMANNS et al.: "Corynebacterium glutamicum lpd gene, complete CDS" AAI GENBANK ACC. NO. Y16642 02/01/99 E.R. BOERMANN et al.: "Molecular analysis of the Corynebecterium glutamicum gdh gene encoding glutmade dehydrogenase" AAM MOL. MICROBIOL., vol. 6, pages 317-326 B.J. EIKMANNS et al.: "Nucleotide sequence, expression and transcriptional analysis of the Corynebacterium glutamicum gltA gene encoding citrate syntase" AAN MICROBILOGY, vol. 140, pages 1817-1828 1994 M.A. PARDO et al.: "Nodulationg ability of Rhizobium tropici is conditioned by plasmid-encoded citrate syntase" MOL. MICROBIL., vol. 11, pages 315-321 1994 Examiner **Date Considered**